

CLAIMS:

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1. A method of interfacing frame based telecommunications traffic from a frame-based network to an asynchronous network, the method comprising mapping the frame-based traffic into cells or packets, and scheduling the dispatch of said cells or packets into the asynchronous network at a substantially constant rate.
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2. A method of interfacing frame based telecommunications traffic in which each frame supports a plurality of data structures each comprising one or more channels from a frame-based network to an asynchronous network in which traffic is transported in cells or packets, the method comprising;
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- issuing credits at a substantially constant rate;
- assigning the credits to each said data structures according to the size of that data structure;
- determining for each said data structure a threshold number of assigned credits; and,
- when said threshold value is reached, assembling that data structure into cells or packets for dispatch into the asynchronous network.
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3. A method as claimed in claim 2, wherein said credits are assigned via a connection control.
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4. A method as claimed in claim 3, wherein said connection control assigns credits to a data structure by writing the identity of that data structure into free locations in a reverse channel map
5. A method as claimed in claim 4, wherein said credit assignments are stored in a random access memory having memory locations one for each TDM channel.
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6. A method as claimed in claim 5, wherein said credits are issued in cycles corresponding to the TDM frame period.
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7. A method as claimed in claim 6, wherein the rate of issuance of credits is greater than the TDM channel rate.

8. A method as claimed in claim 7, wherein said asynchronous network is an ATM network.

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9. An interface arrangement for interfacing frame based telecommunications traffic from a frame-based network to an asynchronous network, the arrangement being arranged to map the frame-based traffic into cells, and incorporating a scheduler for scheduling the dispatch of said cells into the asynchronous network at a substantially constant rate.

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10. An interface arrangement for interfacing frame based telecommunications traffic in which each frame supports a plurality of data structures each comprising one or more channels from a frame-based network to an asynchronous network in which traffic is transported in cells or packets, the method comprising;

15 means for issuing credits at a substantially constant rate;

means for assigning the credits to each said data structures according to the size of that data structure; and

20 means for determining for each said data structure a threshold number of assigned credits whereby, when said threshold value is reached, the data structure is assembled into cells or packets for dispatch into the asynchronous network.

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11. An interface arrangement as claimed in claim 10, wherein said credit assignment means comprises a connection control.

12. An interface arrangement as claimed in claim 11, wherein said connection control assigns credits to a data structure by writing the identity of that data structure into free locations in a reverse channel map.

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13. An interface arrangement as claimed in claim 12, wherein said credit assignments are stored in a random access memory having memory locations one for each TDM channel.

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14. An interface arrangement as claimed in claim 13, and incorporating means for adjusting the rate at which credits are issued by the credit issuing means.

15. An interface arrangement as claimed in claim 14, and incorporating a clock having a first clock rate corresponding to the TDM frame rate and whereby the credit issuing means issues said credits on a cyclic basis.

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16. An interface arrangement as claimed in claim 15, wherein said clock has a second clock rate corresponding to the channel rate of said TDM frames, said second clock rate providing a timing signal for said credit issuing means whereby said credits are issued at a rate at least equal to the channel rate.

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17. A method of scheduling dispatch of a TDM data structure packetized into cells or packets for dispatch into an asynchronous network, the method comprising allocating credits to the data structure at a predetermined rate, comparing the accumulated total of credits for said data structure, and, when said total reaches a predetermined threshold, dispatching said cells into the asynchronous network.

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